Forces of Weathering and Erosion

At times in the geological past the Shield was much higher than it is today. It once rose to a height of over 6000 m! Today, the Sheild rarely rises above 600 m. The reason for this are the forces of weathering and erosion.

Weathering

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Erosion

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Forces

TEMPERATURE	Rock expands in the heat and shrinks with the cold. Constant changes in temperature eventually weaken the rock and it breaks away into small pieces.
RUNNING WATER	Rainfall, the flow of rivers and streams, and the movement of waves eventually wears down and breaks up rock.
ICE	When water freezes in the cracks of rock it expands and beaks off small pieces of rock. Ice can also break up rock when it moves in large, glacial masses.
WIND	Small rock particles carried in wind break away more rock on impact.
PLANTS	Roots growing through cracks weaken the rock and small pieces gradually break away.

When ever large land masses are thrust upwards, usually by forces from within the earth, they become subjected to these forces and are eventually broken down. Many of the forces described work over millions of years to reduce land masses to their present height.